

Why study algebra?

*"Oh well! What difference does it make Algebra?
I have never once in all these years had to find x"*

—Jessica Tate, a character in
the 1979 sitcom *Soap*.

(Of course, "y" is another matter.)

[*Dialog from the Internet forum: Teacher to Teacher**]

- My grade 9 students have difficulty appreciating [algebra's] usefulness... "When are we ever going to need this?" I say, "Never. You will never use this." I then go on to remind them that people don't lift weights (to be prepared... on the street (to lift a) barbell across their chests. You lift weights so that you can knock over a defensive lineman, or carry your groceries, or lift your grandchildren without being sore the next day. You do math exercises so you can improve your ability to think logically, so that you can be a better lawyer, doctor, architect, prison warden, or parent...
- If I get this question in my classroom, I usually tell the student that I am very willing to discuss it at length after school (for) the purpose of this class is to learn algebra and not discuss the goals of education. That has always been the end of the topic. Let's face it, most students are only asking the question to test you or waste time, (my) time...
- Hear me out. I find it interesting that we need to provide justification to the students about why a particular subject is valuable. Apparently the idea that we study different subjects 1) for the sake of knowledge and 2) for the mental discipline we gain, are two justifications that nobody accepts, thus we need to come up with artificial applications and "real-world" connections about where we use math. Be honest with your students. Why do we study algebra? Because it is a foundational subject in mathematics that trains you to think and reason in a logical and orderly manner. Will we be able to use this stuff later? Sure, but that is not really the point here.
- Your response to a student questioning algebra was not only harsh and arrogant, it was totally unnecessary. Students question the reason behind learning algebra because it does not have an obvious connection to everyday life. It is a difficult subject for many students, and if you are not by nature a "math" person, it appears very intimidating and bizarre. It's too bad that there are teachers who have chosen to teach, yet have not one iota of patience when a student asks the simple question, "Why do we need to learn this?" Get off your high-horse.
- I have taught a few adults in GED (General Equivalency Diploma) classes. I often heard statements such as "I don't need algebra so why do we have to take it?" I sometimes answer, "If you don't learn algebra, you won't need it, because you will never get a job that requires it." One bright young man who worked in a textile mill said, "I don't need fractions, because when I need to cut $\frac{5}{6}$ of a yard...I just use the marks on the cutting board." Actually, he was pretty good with fractions. BTW, the mill, closed a couple of years later.

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